

Rocky Flats Environmental Technology Site

1-K92-RFP-94-001

REVISION 0, DRAFT D

WELL CONTROL PROGRAM

APPROVED BY: _____ / _____ / _____
 Director Print Name Date
 EG&G Environmental Restoration Program Division

 Quality Assurance Program Manager Print Name Date
 Data Management and Reporting Services

DOE RFFO/ER Concurrence on file: ☐ Yes ☐ No ☐ NA

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Responsible Organization: Environmental Restoration Program Division Effective Date: _____

CONCURRENCE BY THE FOLLOWING DISCIPLINES WILL BE DOCUMENTED IN THE PROCEDURE HISTORY FILE:

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 Environmental Operations Management
 ERM Solar Pond Projects
 Group 1 Closures
 Industrial Area OU Closures/DD Team
 Industrial Hygiene and Safety
 OU 2 Closure
 OU 5, 6, 7 Closures
 Radiological Health and Engineering
 Waste Management

USE CATEGORY 3

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1. PURPOSE

This administrative procedure establishes requirements, responsibilities, and guidelines for new well and piezometer installations at the Rocky Flats Environmental Technology Site (RFETS). This procedure is implemented through the Environmental Operations Management (EOM), Hydrogeologic Operations Well Control Program. The Well Control Program is integrally designed to incorporate 2 CCR 402-2, State of Colorado, Office of the State Engineer, State Board of Examiners of Water Well Construction and Pump Installation Contractors, Revised and Amended Rules and Regulations of the Board of Examiners of Water Well Construction and Pump Installation Contractors, into activities pertaining to well and piezometer installation and usage. The Well Control Program also furnishes guidance to the Requestor regarding soil disturbance procedures in accordance with 1-F20-ER-EMR-EM.001, Environmental Approval Process for Construction/Excavation Activities on or Near Individual Hazardous Substance Sites (IHSSs), to be followed as pre-implementation to well and piezometer installation activities.

2. SCOPE

This procedure applies to all RFETS Responsible Managers in charge of well installation and is applicable to all new groundwater wells and piezometers to assure that administrative controls include the well's Requestor information, installation methods, purpose, necessary permits, environmental protection measures, and additional information provided on Form GT.6A, Well Installation Notification Form. This form is located in 5-21000-OPS-GT.6, Monitoring Well and Piezometer Installation (See sample Appendix 1, Well Installation Notification Form, in this procedure).

This procedure describes the program, identifies the responsible groups, states the responsibility of each affected group, and furnishes instruction for implementation. This procedure will coordinate, regulate, and monitor well and piezometer permitting, installation, and abandonment activities at RFETS as implemented through EOM, Operating Procedures.

This procedure addresses the following topics:

- Completing a Well Installation Notification (WIN) Form
- Preparing a State of Colorado Notice of Intent to Construct
- Preparing a Soil Disturbance Package
- Using Operating Procedures and preparing Records
- Well Records Review
- State of Colorado Well Permit and Reports
- Evaluation of Well Function

3. DEFINITIONS AND ACRONYMS

3.1 Definitions

Abandonment. An administrative procedure through which a well is removed as a water supply or groundwater sampling point due to termination of purpose, damage, age, or improper construction. This procedure is preceded by the field procedure of plugging to assure that no aquifer communication is attributable to the well installation. Wells that are abandoned must be reported to the State Engineer, Colorado Division of Water Resources.

Notice of Intent to Construct a Well. The well owner's notice to drill a well or piezometer that must be submitted to the State Engineer three days prior to invasive activities and remains valid for the purpose of installation for a period of 3 months. The Notice allows the use of a groundwater monitoring well or piezometer for a period of up to 1 year.

Piezometer. An engineered boring penetrating the earth, primarily installed to permit measurement of the hydrostatic head of the water table or a deeper aquifer.

Permit to Construct a Well. An application form issued and approved by the State Engineer permitting a well to be constructed for purposes such as groundwater monitoring, production, or recovery. If a groundwater monitoring well is planned for longer than 1 year, then an approved Permit to Construct a Well must be obtained before the well installation anniversary date. If water is to be withdrawn, a Permit to Install a Pump is also required.

Requestor. The individual or organization designated the responsibility to act on the behalf of the Responsible Manager in matters involving new well installations.

Responsible Manager. The member of RFETS Management who is assigned responsibility for the funding of the task in the applicable work package, that is, applicable subdivision of the work breakdown structure.

Soil Disturbance Package. The group of six forms used to assess, document, and approve the Requestor's planned installation with regard to duration and location of activity; impact to utility service, IHSS boundary, Plant protection, workers and environment; and hazardous waste determination of investigation derived materials (IDM) from sampling. The six forms located in 1-F20-ER-ERM-EM.001 are:

- Appendix 1, Soil Disturbance Evaluation Form
- Appendix 2, Site Survey Determination for Environmental and Worker Exposure Form
- Appendix 3, Soil Disturbance Assessment Form
- Appendix 4, Rocky Flats Soils Disturbance Approval Form
- Appendix 5, Land Use Request Form
- Appendix 6, Hazardous Waste Determination Form

3.1 Definitions (continued)

Well. An engineered boring penetrating the earth to allow the recovery of water or information about the groundwater quality contained below the water table or underlying aquifers. In this procedure the usage of *well* also includes *piezometer*.

3.2 Acronyms

CDPHE Colorado Department of Public Health and Environment

DOE U.S. Department of Energy

EOM Environmental Operations Management

ERPD Environmental Restoration Program Division

IHSS Individual Hazardous Substance Site

NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System

PFC Project File Center

RFETS Rocky Flats Environmental Technology Site

WCP Well Control Program

WIN Well Installation Notification Form

4. RESPONSIBILITIES**4.1 Construction Management**

Ensures that well construction activities at RFETS are managed by qualified personnel in accordance with COEM-01, Conduct Engineering Manual, and 1-B37-HSP-12.08, Excavations and Trenching.

Issues Soil Disturbance Package to Requestor following receipt of EOM Hydrogeologic Operations approved copy of WIN Form for any well installation activity inside the Buffer Zone, Controlled Area, and Protected Area in accordance with 2-80000-COEM and 1-B37-HSP-12.08.

Designates the Excavation Specialist.

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4.2 Excavation Specialist

Designated by Construction Management.

Initiates soil disturbance review for the Requestor, following receipt of approved WIN Form (Form GT.6A located in 5-21000-OPS-GT), from EOM Hydrogeologic Operations.

Reviews the Soil Disturbance Package completed by the Requestor. This review is for proposed well installation in areas including:

- Locations on or near IHSSs
- Locations included in the RFETS Buffer Zone
- Potential areas of concern
- Controlled Area
- Protected Area
- Polychlorinated Biphenyls locations
- Under building contamination locations
- Additional areas of concern

Reviews the Soil Disturbance Evaluation Form in accordance with Appendix 1 of 1-F20-ER-EMR-EM.001 prepared by the Requestor.

Prepares site survey of activity area to ensure that any proposed well installation will not adversely impact existing overhead, surface, and underground utilities.

Designated as the Soil Disturbance Administrator for approval of the Soil Disturbance Assessment Form in accordance with Appendix 3 of 1-F20-ER-EMR-EM.001.

Authorizes initiation of well installation activity.

Conducts well installation activity pre-evolution meeting.

Performs initial and subsequent site inspections, as needed, providing documentation on the Rocky Flats Soil Disturbance Approval Form in accordance with Appendix 4 of 1-F20-ER-EMR-EM.001.

4.3 ERPD, EOM

Determines if the well installation activity will or may occur on or near an IHSS or other area of environmental concern.

Notifies the Requestor, Waste Management, Ecology and Watershed Management Division, and the Operable Unit Manager that the planned well installation activity is on or near an IHSS and that compliance with 1-F20-ER-EMR-EM.001 is required.

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4.3 ERPD, EOM (continued)

Responsible for the surveillance and oversight of well installation activities conducted within an IHSS or that potentially affect an IHSS or other area of environmental concern to ensure that the activities comply with environmental regulations and permits, in conjunction with Waste Management, Ecology and Watershed Management Division, and with U.S. Environmental Protection Agency and the Colorado Department of Public Health and Environment (CDPHE) guidelines and directives.

Notifies EOM Hydrogeologic Operations of soil disturbance activities planned to be conducted within 25 ft of an existing groundwater well.

Prepares the Soil Disturbance Evaluation Form with the Requestor and submits the form to the Soil Disturbance Assessment Committee.

Reviews and approves the pertinent sections of the Site Survey Determination for Environmental and Worker Exposure Form in accordance with Appendix 2 of 1-F20-ER-EMR-EM.001.

Issues and approves the Land Use Request Form in accordance with Appendix 5 of 1-F20-ER-EMR-EM.001 involving new well drilling following EOM Hydrogeologic Operations approval of the WIN Form.

Provides technical support and expertise to complete the Hazardous Waste Dertermination Form in accordance with Appendix 6 of 1-F20-ER-EMR-EM.001, if petitioned by the Requestor.

4.4 EOM, Hydrogeologic Operations

Acts as the primary ERPD point of contact for implementation of this procedure.

Designs and administers the Well Control Program (WCP) in cooperation with the DOE, RFETS Facility Management and Operations, and RFETS Construction Management.

Advises Responsible Manager or Requestor regarding administrative procedures relating to the WCP.

Reviews and approves the WIN Form submitted by the Requestor.

Submits the Notice of Intent to Construct a well, as specified in Rule 6.3, 2 CCR 402-2, to the State Engineer at least 3 days before drilling.

Submits the Permit to Construct a Well, as specified in Rule 6.1, 2 CCR 402-2, to the State Engineer following installation and decision to maintain well for more than 12 months.

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4.4 EOM, Hydrogeologic Operations (continued)

Submits the Well Abandonment Report, as specified in Rule 6.11, 2 CCR 402-2, to the State Engineer for wells designated for abandonment under the Well Abandonment and Replacement Program.

Ensures that the well installation activities comply with applicable environmental regulations, applicable ERPD Operating Procedures and current permits, in conjunction with the DOE Environmental Protection Department, with 2 CCR 402-2, and the Rocky Flats Interagency Agreement guidelines.

4.5 Industrial Hygiene and Safety

Recommends engineering and administrative controls necessary to minimize potential exposure to hazardous material.

Ensures that Personnel Protective Equipment requirements for well installation activities have been defined in the Integrated Work Control Package, Health and Safety Plan.

Reviews and approves pertinent section of the Site Survey Determination for Environmental and Worker Exposure Form.

Approves the pertinent sections of the Soil Disturbance Assessment Form in accordance with Appendix 3 of 1-F20-ER-EMR-EM.001.

4.6 Radiological Health and Engineering

Reviews and approves the pertinent section of the Site Survey Determination for Environmental and Worker Exposure Form.

Approves the pertinent section of the Soil Disturbance Assessment Form.

4.7 Requestor

Acts as the Responsible Manager's designee in the preparation of the WIN Form and other forms in 1-F20-ER-EMR-EM.001 and in:

- 5-21000-OPS-FO, Environmental Management Department Operating Procedures, Volume 1: Field Operations
- 5-21000-OPS GW, Environmental Management Department Operating Procedures, Volume II: Ground Water
- 5-21000-OPS GT, Environmental Management Department Operating Procedures, Volume III: Geotechnical

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4.8 Responsible Manager

Responsible for control and oversight of the well installation activities and ensures compliance with the requirements of this procedure.

Prepares the Soil Disturbance Evaluation Form in conjunction with EOM and initiates the Rocky Flats Soil Disturbance Approval Form.

Prepares the Soil Disturbance Assessment Form in conjunction with EOM.

Initiates and prepares the Rocky Flats Soil Disturbance Approval Form.

Prepares and approves the Hazardous Waste Determination Form with a qualified Hazardous Waste Generator in accordance with Appendix 6 of 1-F20-ER-EMR-EM.001.

Ensures that the well drilling contractor is properly licensed in accordance with Rule 8, 2 CCR 402-2.

Ensures that adequate time is allotted within this procedure for review, completion, and filing of soil disturbance, land use, and well permits.

Prepares, obtains reviews, and acquires approvals for soil disturbance as documented on the Soil Disturbance Evaluation, Soil Disturbance Assessment, and Rocky Flats Soil Disturbance Forms.

Prepares, obtains reviews, and acquires approval for worker and environmental exposure as documented on the Site Survey Determination for Environmental and Worker Exposure Form.

Prepares and obtains approval for the use of RFETS land as documented on the Land Use Request Form.

Designates the Requestor as needed to implement Well Control Program procedures.

4.9 RFETS Construction Management

Issues a Soil Disturbance Package to Requestor consisting of the following five forms provided in 1-F20-ER-EMR-EM.001:

- Soil Disturbance Evaluation Form
- Site Survey Determination for Environmental and Worker Exposure Form
- Soil Disturbance Assessment Form
- Rocky Flats Soil Disturbance Approval Form
- Hazardous Waste Determination Form

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1 **4.10 Soil Disturbance Assessment Committee**

2
3 Reviews the Soil Disturbance Evaluation Form.

4
5 **5. PERFORMANCE DOCUMENTS**

6
7 The following documents are required for the performance of this procedure:

8
9 1-F20-ER-ERM-EM.001, Environmental Approval Process for Construction/Excavation
10 Activities on or Near Individual Hazardous Substance Sites (IHSSs)

11
12 2 CCR 402-2, State of Colorado, Office of the State Engineer, State Board of Examiners of
13 Water Well Construction and Pump Installation Contractors, Revised and Amended Rules
14 and Regulations of the Board of Examiners of Water Well Construction and Pump
15 Installation Contractors

16
17 5-21000-OPS-GT, GT.01, Logging Alluvial and Bedrock Material

18
19 5-21000-OPS-GT, GT.05, Plugging and Abandonment of Boreholes

20
21 5-21000-OPS-GT, GT.06, Monitoring Well and Piezometer Installation

22
23 5-21000-OPS-GT, GT.11, Plugging and Abandonment of Wells

24
25 5-21000-OPS-GT, GT.17, Land Surveying

26
27 5-21000-OPS-GW, GW.2, Well Development

28
29

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6. INSTRUCTIONS

The following instructions, including sequential reviews, will accomplish the purpose of the WCP. This procedure is to be implemented following work plan approval and during the planning stages of the installation of wells and piezometers for groundwater monitoring, testing, and production or recovery.

6.1 Well Installation Notification Form**Requestor**

[1] Determine the need for new well installations.

[2] Complete and submit the WIN Form (Form GT.6A located in 5-21000-OPS-GT, GT.6) to EOM Hydrogeologic Operations for each planned well or piezometer.

The map on the reverse side of the form will also be completed to indicate the approximate location of the Requestor's well within the nearest 1/4, 1/4 Section. The Requestor's well number should also be indicated on page 2 of the WIN Form based upon the Requestor's work plan. The Requestor's well number will be changed to a location code as given in Step 6.1[3][A][a]. The RFETS Well Status List contains a tabulation of Colorado State plane coordinates for existing RFETS groundwater monitoring wells. The nearest RFETS well to the Requestor's well may be determined by using the RFETS Well Status List maintained by EOM Hydrogeologic Operations. The approximate location of the nearest RFETS well will also be indicated on the WIN Form map.

EOM Hydrogeologic Operations

[3] Review the WIN Form and perform one of the following:

[A] **IF** the form is acceptable as completed,

THEN:

[a] Assign the location code replacing the Requestor's well number.

[b] Approve the WIN Form.

[c] Return a copy of the approved WIN Form to Requestor.

[d] Return a copy of the approved WIN Form to RFETS Construction Management.

[B] **IF** the form is **NOT** acceptable as completed,

THEN reject the form, and specify what additional documentation is required from the Requestor until the WIN Form is accurately completed.

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6.2 State of Colorado Notice of Intent to Construct**EOM Hydrogeologic Operations**

- [1] Prepare the Notice of Intent to Construct for the Requestor's well and submit the notice to DOE for review and signature approval, following approval of the WIN Form.
- [2] Submit the Notice of Intent to Construct, as specified under Rule 6.3, 2 CCR 402-2, with signature approval of DOE, to the State Engineer at least 3 days before well drilling.

This pre-permitting step initiates administrative tracking of the well.

- [3] **IF** wells are planned for production or recovery,
THEN Submit the Permit to Construct a Well and the Permit to Install a Pump for the Requestor to the State Engineer.
- [4] File the well completion and pump installation reports with the State Engineer within 60 days of well completion as applicable.
- [5] Return applicable copies of approved well permits to the Requestor.
- [6] Return approved Notice of Intent to Construct to DOE.

6.3 Soil Disturbance Package

NOTE *A Soil Disturbance Package is needed regardless of whether or not the proposed well installation is near or in an IHSS.*

Responsible Manager

- [1] Review the Soil Disturbance Package forms for clarification of soil disturbance activities and site access procedure guidelines.
- [2] Allow at least 2 weeks time for review, completion, and approval of the Soil Disturbance Package before the initiation of well installation activities.
- [3] Provide a work plan of well installation activity to Waste Management, Ecology and Water Management, to obtain permits as required for environmental protection under NEPA, NPDES, Clean Air Act, and Clean Water Act.

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6.3 Soil Disturbance Package (continued)**Requestor**

- [4] Obtain Soil Disturbance Package from RFETS Construction Management following receipt of approved Notice of Intent to Construct or Permit to Construct a Well as applicable and approved WIN Form from EOM Hydrogeologic Operations.
- [5] Obtain Land Use Request Form from EOM Land Use Coordinator.
- [6] Complete the Land Use Request Form and return it to the Land Use Coordinator for approval and record filing.
- [7] Complete and submit the Soil Disturbance Package forms to the Excavation Specialist.
- [8] Obtain authorization from EOM and Waste Management, Ecology and Water Management, for planned well installation activity which is closer than 25 ft to an existing groundwater well.
- [9] Obtain authorization from EOM and Waste Management, Ecology and Water Management, for planned well installation activity which is in or near an IHSS.

RFETS Construction Management

- [10] Issue a Soil Disturbance Package to Requestor consisting of the following five forms provided in 1-F20-ER-EMR-EM.001 following receipt of approved WIN form:
 - Soil Disturbance Evaluation Form
 - Site Survey Determination for Environmental and Worker Exposure Form
 - Soil Disturbance Assessment Form
 - Rocky Flats Soil Disturbance Approval Form
 - Hazardous Waste Determination Form
- [11] Review, approve and retain the applicable Soil Disturbance Package forms.
- [12] Provide copies of the Soil Disturbance Package forms to the Requestor for filing.

Excavation Specialist

- [13] Initiate a soil disturbance review for Requestor.
- [14] Review the Soil Disturbance Evaluation Form.
- [15] Review and approve the Rocky Flats Soil Disturbance Approval Form.
- [16] Prepare a site utility survey of the well installation activity area.

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6.3 Soil Disturbance Package (continued)**Excavation Specialist (continued)**

- [17] Approve the Soil Disturbance Assessment Form, following concurrence by EOM, Industrial Hygiene, Radiological Health and Engineering and Occupational Safety.
- [18] Return the approved Soil Disturbance Assessment Form and the Rocky Flats Soil Disturbance Approval Form to Construction Management.

Industrial Hygiene and Safety

- [19] Review and approve Section 4 of the Site Survey Determination for Environmental and Worker Exposure Form.
- [20] Provide concurrence on the Soil Disturbance Assessment Form.

Radiological Health and Engineering

- [21] Review and approve Section 3 of the Site Survey Determination for Environmental and Worker Exposure Form.

Soil Disturbance Assessment Committee

- [22] Review the Soil Disturbance Evaluation Form.

EOM

- [23] Submit the well installation activity plan of the Requestor for review by the Soil Disturbance Assessment Committee for compliance with the EPA and CDPHE guidelines, other regulatory and permit requirements, appropriate health and safety practices, and for potential interference with RFETS utilities.

NOTE *Steps [24] and [25] describe actions to be performed if the well installation activity occurs near an IHSS or existing groundwater well.*

- [24] **IF** the activity occurs on or near an IHSS or other environmental area of concern as determined by EOM,

THEN:

[A] Notify Requestor, Waste Management, Ecology and Watershed Management Division, and Operable Unit Managers of the Requestor's well location plan.

[B] Advise Requestor to follow 1-F20-ER-EMR-EM.001.

[C] Recommend a suitable alternate location for the Requestor's well unless the well location is specifically necessary for IHSS investigation.

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6.3 Soil Disturbance Package (continued)**EOM (continued)**

[25] **IF** the well installation activity occurs within 25 ft of an existing groundwater well,
THEN:

[A] Advise Waste Management, Ecology and Watershed Management and EOM
Hydrogeologic Operations of the existing groundwater well location code.

[B] Determine specific groundwater and well safeguards required to install the
Requestor's well.

[C] Recommend a suitable alternate location for the Requestor's well.

[26] Prepare Soil Disturbance Evaluation Form in conjunction with Requestor.

[27] Submit Soil Disturbance Evaluation Form to Soil Disturbance Committee.

[28] Review and approve Sections 1 and 2 of the Site Survey Determination for
Environmental and Worker Exposure Form.

[29] **WHEN** the copy of the Requestor's approved WIN Form from EOM Hydrogeologic
Operations has been received,
THEN review, approve, and retain the Land Use Request Form.

[30] Provide a copy of the Land Use Request Form to the Requestor for filing.

6.4 Operating Procedures and Records**Requestor**

[1] Prepare the Groundwater Monitoring Well and Piezometer Report Form GT.6B in
accordance with 5-21000-OPS-GT, GT.6, following well installation

[2] Obtain well coordinate data in accordance with 5-21000-OPS-GT, GT.17.

[3] Prepare Well Development and Sampling Form GW.2A in accordance with 5-21000-
OPS-GW, GW.2, before groundwater sampling.

[4] Prepare Rocky Flats Plant Borehole Log Form GT.1A in accordance with 5-21000-
OPS-GT, GT.1, following collection of geologic data.

[5] Prepare Borehole Abandonment Field Activities Report Form GT.5A in accordance
with 5-21000-OPS-GT, GT.5 and 5-21000-OPS-GT, GT.11, if well is abandoned.

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6.4 Operating Procedures and Records (continued)**Requestor (continued)**

- [6] Provide the following information, when applicable, as soon as completed to EOM Hydrogeologic Operations:
- Form GT.6B, Groundwater Monitoring Well and Piezometer Report
 - Land surveyed well location coordinates
 - Form GW.2A, Well Development and Sampling
 - Form GT.1A, Rocky Flats Plant Borehole Log
 - Form GT.5A, Borehole Abandonment Field Activities Report

All forms and logs will be prepared in accordance with the specifications and deliverable requirements given in the respective operating procedures.

6.5 Well Records Review**EOM Hydrogeologic Operations**

- [1] Review the well records and perform one of the following:
- Accept the records as completed by Requestor
 - Reject the records and request further documentation from Requestor
- [2] Review the long-term or ultimate use of the installed well for determination of additional permitting required as listed in Steps 6.6[1][A], [B], and [E].

6.6 State of Colorado Well Permit and Reports**EOM Hydrogeologic Operations**

- [1] Prepare the well permit and report documentation.
- [A] **IF** the installed well use is designed to extend beyond 1 year,
THEN prepare the Permit to Construct a Well in accordance with 2 CCR 402-2.
- [B] Submit the Permit to Construct a Well for review and approval by the DOE.
- [C] Submit the Permit to Construct a Well to the State Engineer for approval.
- [D] **IF** the Permit to Construct a Well is rejected by the State Engineer,
THEN make corrections and resubmit the documents to the State Engineer.
- [E] **IF** the installed well is to be abandoned,
THEN prepare a Well Abandonment Report in accordance with Rule 11, 2 CCR 402-2 for submission to the State Engineer.
- [2] Return applicable copies of the approved well permits and reports to DOE and the Requestor.

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6.7 Evaluation of Well Function**EOM Hydrogeologic Operations**

- [1] Track the status of permitted wells using the WCP to ensure that the installed well continues to properly meet groundwater monitoring objectives or other necessary program purposes.
- [2] Evaluate the status and potential future use of each well on a quarterly basis under the WCP.
- [3] Maintain well function database inventory to include (as applicable) the following parameters for RFETS wells:
 - Location Code (Well Number)
 - Office of State Engineer Well Number
 - Installation Date
 - Driller and License Number
 - Abandonment Date and Report
 - Notice of Intent to Construct
 - Permit to Construct a Well
 - Permit to Install a Pump
 - Replacement Well

7. RECORDS

Management of all records is consistent with 1-77000-RM-001, Records Management Guidance for Records Sources.

Requestor

- [1] Ensure that a sufficient number of copies of approved forms are obtained for records filing to submit to the following:
 - ERPD, EOM
 - ERPD Project File Center (PFC)
 - DOE
 - State Engineer
 - RFETS Construction Management
- [2] Ensure that copies of the following quality-related records, as appropriate, are transmitted to the EOM Hydrogeologic Operations in accordance with this procedure:
 - WIN Form as instructed in Step 6.1 [2]
 - Forms and information for the following in accordance with Step 6.4[6]
 - Groundwater Monitoring Well and Piezometer Report
 - Land surveyed well location coordinates
 - Well Development and Sampling
 - Rocky Flats Plant Borehole Log
 - Borehole Abandonment Field Activities Report

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7. RECORDS (continued)**Requestor (continued)**

[3] Ensure that a copy of the WIN Form is transmitted to Construction Management in accordance with Step 6.1[3][A][d].

[4] Ensure that the original and one copy of the following quality-related records, as appropriate, are transmitted to the ERPD Project File Center in accordance with 3-21000-ADM-17.01, Quality Assurance Records Management:

- Site Survey Determination for Environmental and Worker Exposure Form
- Rocky Flats Soil Disturbance Approval Form
- Hazardous Waste Determination Form
- Land Use Request Form
- Soil Disturbance Evaluation Form
- Soil Disturbance Assessment Form

Submission of record copies to ERPD Project File Center will satisfy Administrative Record requirements.

There are no nonquality records generated by this procedure.

EOM Hydrogeologic Operations

[5] Ensure that the original records of the following quality-related records, as applicable, are transmitted to the State Engineer in accordance with Rules and Regulations, 2 CCR 402-2 and with this procedure:

- Notice of Intent to Construct in accordance with Step 6.2[2]
- Permit to Construct a Well in accordance with Step 6.2[3]
- Permit to Install a Pump in accordance with Step 6.2[3]
- Well Abandonment Report in accordance with Step 6.6[1][E]
- Well Completion Report in accordance with Step 6.2[4]
- Pump Installation Report in accordance with Step 6.2[4]

[6] Ensure that two copies of the following quality related records, as applicable, are transmitted to the ERPD Project File Center in accordance with 3-21000-ADM-17.01, Quality Assurance Records Management:

- WIN Form
- Notice of Intent to Construct
- Permit to Construct a Well
- Permit to Install a Pump
- Well Abandonment Report
- Well Completion Report
- Pump Installation Report
- Form GT.6B
- Well Land Survey Coordinates
- Form GW.2A

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1 **7. RECORDS (continued)**

2
3 **EOM Hydrogeologic Operations (continued)**

- 4 • Form GT.1A
5 • Form GT.5A

6
7 Submission of record copies to ERPD Project File Center will satisfy Administrative
8 Record requirements.

9
10 There are no nonquality records generated by this procedure.

11
12 **8. REFERENCES**

13
14 Rocky Flats Interagency Agreement, 01/22/91

15
16 State of Colorado, Office of the State Engineer, State Board of Examiners of Water Well
17 Construction and Pump Installation Contractors, Revised and Amended Rules and
18 Regulations of the Board of Examiners of Water Well Construction and Pump Installation
19 Contractors, 2 CCR 402-2, 08/01/88

20
21 ERPД Internal Document, Well Status List for RFETS

22
23 1-B37-HSP-12.08, Excavations and Trenching

24
25 1-77000-RM-001, Records Management Guidance for Records Sources

26
27 COEM-01, Conduct Engineering Manual

28
29 5-21000-OPS-FO, Environmental Management Department Operating Procedures, Volume
30 1: Field Operations

31
32 5-21000-OPS-GW, Environmental Management Department Operating Procedures,
33 Volume II: Groundwater

34
35 5-21000-OPS-GT, Environmental Management Department Operating Procedures, Volume
36 III: Geotechnical

37
38 1-F20-ER-EMR-EM.001, Environmental Approval Process for Construction/Excavation
39 Activities on or Near Individual Hazardous Substance Sites (IHSSs)

40
41 3-21000-ADM-17.01, Quality Assurance Records Management
42

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APPENDIX 1

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WELL INSTALLATION NOTIFICATION FORM

U.S. DEPARTMENT OF ENERGY ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE		WCP FORM (Rev 0)
WELL INSTALLATION NOTIFICATION FORM		
Project Name	Location Code (Well Number) (Hydrogeologic Operations Use Only)	
Requestor (Person/Organization)	Phone Number	Pager ID
Approximate Well Location (Show on Back) Approximate State Plane Coordinates _____ Northing, _____ Easting _____ 1/4, _____ 1/4, Section _____ T _____ R		
Land Owner <input type="checkbox"/> DOE <input type="checkbox"/> Other _____		
Type of Well Installation <input type="checkbox"/> Monitoring and testing only <input type="checkbox"/> Production/Recovery <input type="checkbox"/> Other _____		
Purpose of Well	Driller License Number	
Data Quality Objectives		
Expected Date of Completion	Projected Life of Well <input type="checkbox"/> <1 year <input type="checkbox"/> >1 year	Future Uses
Target Aquifer <input type="checkbox"/> Shallow Bedrock - Unconfirmed <input type="checkbox"/> Surficial Deposits - Unconfirmed <input type="checkbox"/> Deep Bedrock - Confirmed (Requires Special License)		
Well Construction Details <input type="checkbox"/> Other _____ <input type="checkbox"/> Per SOP _____		
Well Diameter	Casing Type	Screened Interval _____ to _____ ft.
Annular Seal Type and Interval	Estimated Total Depth	Pump Installation <input type="checkbox"/> N/A <input type="checkbox"/> Type/H.P. _____
Type of Well Installation <input type="checkbox"/> Hollow-Stem Auger <input type="checkbox"/> Driven <input type="checkbox"/> Sonic <input type="checkbox"/> Fluid Rotary <input type="checkbox"/> Air Rotary <input type="checkbox"/> Other _____		
Environmental Protection Measures Taken During Drilling		
Requestor Signature	Date	Page ____ of ____
HYDROGEOLOGIC OPERATIONS USE ONLY		
Well Installation Requirement	<input type="checkbox"/> Notice	<input type="checkbox"/> Permit
Pump Installation Requirement	<input type="checkbox"/> None	<input type="checkbox"/> Permit
Drilling Contractor Requirement	<input type="checkbox"/> None <input type="checkbox"/> Special License	<input type="checkbox"/> Licensed
Well Abandonment	<input type="checkbox"/> Notice	<input type="checkbox"/> None
Reviewer: _____ Date: _____ Print Name Signature		

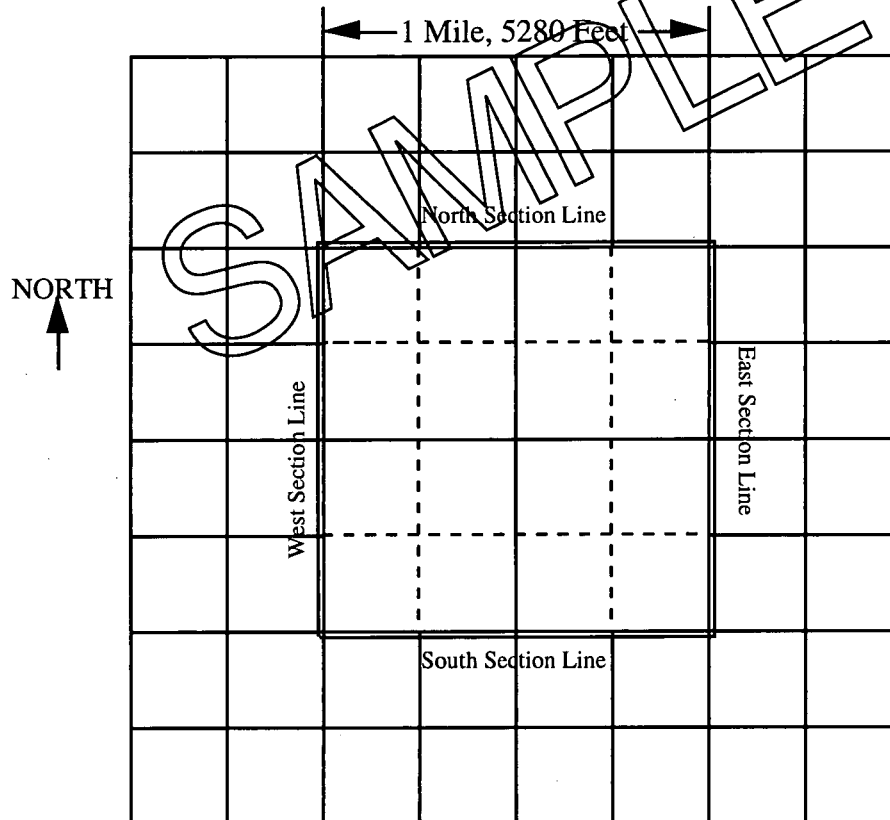
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APPENDIX 1

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The Location of the Proposed Well

Use the CENTER SECTION (1 section, 640 acres) for the well location



The scale of the diagram is 2 inches = 1 mile
Each small square represents 40 acres

Key:
Requestor's Well ○
Nearest RFP Well □
RFP Well No. _____

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